

Title (en)
HEARING AID DEVICE

Title (de)
HÖRGERÄTEVORRICHTUNG

Title (fr)
DISPOSITIF DE PROTHÈSE AUDITIVE

Publication
EP 3993445 A4 20220907 (EN)

Application
EP 20916253 A 20200829

Priority
CN 2020112326 W 20200829

Abstract (en)
[origin: EP3993445A1] The present application discloses a hearing assistance device, and the hearing assistance may comprise: a signal input module configured to receive an initial sound and convert the initial sound into an electrical signal; a signal processing module configured to process the electrical signal and generate a control signal; and at least one output transducer configured to convert the control signal into a bone conduction sound wave of an user and an air conduction sound wave that can be heard by the user's ears, wherein within a target frequency range, the air conduction sound wave is transmitted to the user's ears, so that a sound intensity of an air conduction sound heard by the user's ears is stronger than a sound intensity of the initial sound received by the signal input module.

IPC 8 full level
H04R 1/28 (2006.01); **H04R 25/00** (2006.01); **H04R 9/06** (2006.01); **H04R 11/02** (2006.01)

CPC (source: EP KR US)
H04R 9/066 (2013.01 - EP); **H04R 11/02** (2013.01 - EP); **H04R 25/48** (2013.01 - EP KR); **H04R 25/50** (2013.01 - US); **H04R 25/604** (2013.01 - KR); **H04R 25/606** (2013.01 - EP KR US); **H04R 25/607** (2019.05 - KR); **H04R 1/2834** (2013.01 - EP); **H04R 3/14** (2013.01 - EP); **H04R 25/554** (2013.01 - EP); **H04R 2400/03** (2013.01 - EP); **H04R 2400/07** (2013.01 - EP); **H04R 2430/03** (2013.01 - US); **H04R 2460/13** (2013.01 - EP KR US)

Citation (search report)

- [X] KR 102039839 B1 20191101 - UNIV INDUSTRY FOUNDATION YONSEI UNIV WONJU CAMPUS [KR]
- [X] CN 2452234 Y 20011003 - XIU XIANGFENG [CN]
- [I] US 2017164088 A1 20170608 - FUKUDA MIKIO [JP]
- [A] US 10609496 B2 20200331 - LIAO FENGYUN [CN], et al
- See also references of WO 2022041166A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3993445 A1 20220504; **EP 3993445 A4 20220907**; BR 112022020678 A2 20230314; CN 115053539 A 20220913; JP 2023525749 A 20230619; KR 20220164781 A 20221213; US 2023014930 A1 20230119; WO 2022041166 A1 20220303

DOCDB simple family (application)
EP 20916253 A 20200829; BR 112022020678 A 20200829; CN 2020112326 W 20200829; CN 202080095829 A 20200829; JP 2022567823 A 20200829; KR 20227038792 A 20200829; US 202217934188 A 20220921